Pocket Notebook, PN-70-10-03, Cat. 1179

This notebook consists of twenty-eight unbound and laminated leaves, which have been numbered by an archivist. The entries are in Edison's hand. The first several leaves contain lists of machines, tools, office furniture and supplies, and accounts of personal and business expenses. There is also a one-page agreement of October 29, 1870 between Edison and Samuel W. Ropes, Jr. The latter part of the book contains descriptions and drawings of printing telegraph and other apparatus "Drawn at L Serrells office" on October 3, 1870 and a drawing of a chemical pen dated Oct. 10, 1870. The inside back cover bears the inscription "all new inventions I will here after keep a full record."

Blank pages not filmed: 11, 14, 16.

[illegible]	[illegible]
[illegible]	93.00
[illegible] Barrel	10.79
[illegible]	[illegible]
[illegible] Kinds	11.11
[illegible]	9.00
[illegible]	34.50
[illegible]	18.00
[illegible]	16.00
	26.00
	27.90

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	22.50
[illegible]	19.97
[illegible]	15.00
[illegible]	13.50
[illegible]	4.00
[illegible]	9.99
	[illegible]

PN 70-10-03

E-6577-1

cat. 1179

Sheets numbered in circle on lower right corner by N.R.S. 6/3/68 before laminating

1	Die sinking Machine	405.00
1	Shaper	550.00
2	Engine Lathe - large size	270.00
		360.00
~~1~~	~~Shaper - Vertical Lathe~~	
~~3~~	~~Vertical Small Lathes~~	
2	Screw machines	808.00
~~1~~	~~Portable Lathe~~	
~~1~~	~~Jig Borer~~	
1	Large Punching machine	
~~1~~	~~Small~~	
1	Grind-lines from Lex. Factory	
~~1~~	~~Stamp Mill Grab~~	
~~1~~	~~Milling Machines~~	
10	~~Power Presses~~	
~~1~~	~~Small Hydraulic Leather~~	
~~2~~	~~Vises~~ - at 5.75	115.00
~~1~~	~~Hull Pen - 4 Spindles~~	360.00
~~1~~	~~Steam Sheet~~	
	~~Millers~~	
~~1~~	~~Slow Speed Hammer~~	

(2)

1 ~~Brown & S. Milling Machines~~
1 ~~Screw plates~~
1 ~~Band saw & Saws~~
~~24~~ ~~Hand vises~~
~~2~~ ~~Cutting Shears~~
~~4~~ ~~Bench vises & Pipes~~
~~4~~ ~~Small hand vises~~
~~20~~ ~~Pair Tuissers~~
~~6~~ ~~Monkey wrenches~~
~~6~~ ~~Hammers assorted~~
~~24~~ ~~Pairs squares assorted~~
~~24~~ ~~Gauges~~
~~2~~ ~~Scribers~~
~~2~~ ~~Hand punches~~
3 Calipers rules
1 ~~Straight Edges~~
~~2~~ ~~Drill & Bolt hand vises~~
~~2~~ ~~Bow Sawes~~
2 ~~Centre Hammers~~
~~3 Doz~~ Assorted small hammers

2 Bunsen Burners
1 ~~Pair small metal shears~~
1 Rasp
1 Complete set of carpenter & Model makers Tools or Patterns
~~2~~ ~~Complete set Twist Drills~~
~~2~~ ~~Emery Plates~~
~~1~~ ~~Pantographs~~
~~2~~ ~~Setters & irons small & large~~
~~1~~ ~~Devil Rifflers~~
~~1~~ ~~Wheels set in frame~~
~~2~~ ~~Metal Saws~~
1 Steam circular metal saw
4 Hammers
~~1~~ ~~Screw Jacks~~
3 Stocks & Dies
~~5~~ ~~Mallets~~
2 Lead hammers
1 Carpenters rule
1 ~~Tape line~~

1 Microscope
1 Eye glass
3 Jacquard Brushes
1 Relort stand
4 Oil Cans large
1 Large Stove
35 Paper Curtains
1 ~~Nurse's medicine chest~~
~~3 Set figures~~
3 " Letters
1 ~~Twist Drill gauge~~
~~35 Oil cans~~
~~6 Pen rules~~
~~45 Buckets~~
~~2 Cuspidors~~
2 Brooms
3 Pails
1 Sink & water
Gas Pipe & 35 Burners
~~45 Coats~~
~~3 Kilney Pipes~~

1 Office Desk
1 Set Books
26 Set tiles
1/2 Iron assorted steel & iron
40 feet pattern wood
~~6 Metal Boxes~~
140 feet Benching
3 Partitions
Shelving for office supply and
Tool room
20 Stools
3 Arm chairs
1 Molding rack
3 Large card Buffles
5 Ibs Solder
Belting
Hangers Shafting & Pulleys
3 Door Locks
40 Drawers ~~Wanted~~
2 Surface Plates
1 ~~Hand drill for metal~~

1 set assorted files
1 Look ing glass
2.5 Dozen
1 Gallon Alcohol
1 Gallon fine oil
1 gallon shaft lubricating oil
1 " Lathe oil
10 ~~Polishing spindles for lathe~~
~~assorted sizes and~~
2 Tablespoons do
~~1 Coffee do~~
1 Soldering iron Bottle
1 Ink stand
50 feet rubber tubing
3 gas stands
~~use~~
~~1 Mortar~~
~~1 Pestle~~
~~1 Mortar & pestle~~
~~1 Sheet~~
1 Cast Pan
~~3 Brass Pipes~~

Carpet for Office
Paper " "
2 Ink Bottles
1 Bottle red ink
1000 Bill heads
1000 Cards
~~1~~ Box Envelopes
1 Ream writing paper
~~1 Drawing Table~~
~~1 Gas Bracket stand~~
3 tumblers
1 Pitcher
~~Tumbler wire~~
Bottle red ink
~~Machine screws~~
3 Bottles spring brass wire
~~Milling tools~~
~~Ex-machine screws~~
~~Bell plate~~
1 Clock
~~1 Sprocket~~

1 Charcoal Box
1 Gas burnering Iron
3 lbs Pumice stone
6 Cans 10 lbs each (assorted) emery
~~200 Sheets Sandpaper~~
6 cloth & Sand Paper
3 lb glue
1 lb Prussiate Potash
3 lbs Soda
2 lbs fine unfinished Lacquer
3 Lacquer Strainers
20 Sheet filler paper
3 Funnels
1 Screw Case for Standards
1 Scissors
~~1 Wire Brush~~
1 Anvil block
~~1 Jumper for Saws~~
~~1 Jewellers Anvil~~
~~Planer Squares~~
~~Depth Gauge~~

~~Hardwood Bench~~
~~Leather Forge~~
1 Common Drill Press
~~1 Sinber Milling machine~~
Anvil Block
~~Stake~~

Belden Hay Hamen

14 Inch swing 6 Lathe	300 00
Planer 24 inch Sqr	550 00
Screw M	400 00
	1250 00
Charges	1100 50
	$ 100 00

Shaw & Co Ax Hammer
Smallest size 300 00

E. Hyde Bro. To Thomas A. Edison

Oct 6	Cash	20 00
17	Cash	30 00
20	Cash	20 00

T. A. Edison Bro. To E. Hyde

Oct 3	Cash	30 00
Oct 6	Cash	20 00

Acct

Fare for self & Hyde		
Hotel Cost	42	00
Freight	8	35
Hyde	20	00
Fare		80
Microscope	8	50
Tickets & fare	2	00
Pattern for Pencil Eng	1	50
Expressage		25
Fare		64
Tickets to the fair	1	00
Fare Hotel fare		30
Expressage Bises	1	40
Paid Dutton Carpenter	50	00
" Hyde	50	00
Pitt Compositor		
~~Advanced on C~~	~~40~~	~~00~~
Tin smith	11	30
Fare & Ticket for four	1	06
Candles		25
Soda		65

Freight	4	99
do	7	50
do	7	20
Oils &c on acct	20	00
Wood Screws		50
Gave Grimm	2	00
Paid Man	11	25
Other Man	10	00
Storeroage		75
Paid Grimm	13	60
Markwort	5	00
Hyde	30	00
Gould	400	00
Denton	150	00
[illegible]		30
Carpet or Matting	8	10
Paid to men a for tiles	389	87
Paid Hyde	50	00

Private acct

Gave Unger on Commissariat Pch	25	00
paid Aflaman on Unusual to 5th	6	00

Newark Oct 29 1840

In consideration of the sum of one dollar the receipt of which is hereby acknowledged I promise to pay to J A Ellison his heirs or legal representatives One twelfth $\frac{1}{12}$ undivided ~~interest~~ of all profits arising directly or indirectly from my Connection and relation and introduction of instruments etc with the Gold Stock Telegraph Co of N York for a period of ten 10 years from date after ~~paying~~ receiving from him full payment of ~~a~~ dollars by me on my own promissory which is $3,556

S. F. B. Morse

(10)

List of tools to be packed

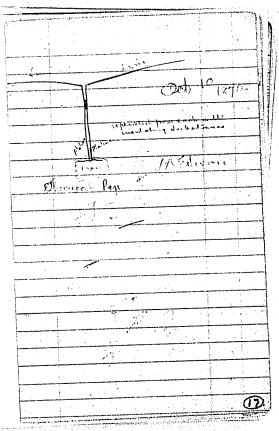
1 Forge & Blower
1 Anvil & Block
1 Large Back Gear Punches
Bare Plates
1 Doz Taper reamers
1 Rasp
Cut Carpenters Tools
1 Brass Plate
2 Soldering irons Large & small
1 Swift Bolt cutter
Stock & Dies
6 Mallets
1 Tin Tips
1 Tin Cans
3 Hanger Punches
1 Robert Saw
4 Large Oil Cans
35 Paper Cartridges
35 Oil Cans
2 Coolers

Brooms
3 Pails
1 Sink & Walk, Pipe
15 Bags
1 ~~Office Book~~
1 Tool Room Book
1 ~~Set Books~~

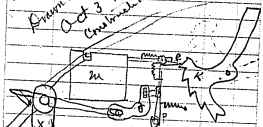
Lent Wann	25 00
Ropes	14 00
Emmet	5 00
Englehman	5 00

Total amount spent $ 6,241. 65.
" Jour Men 3,010. 55
J. Oct 5 — 1876
Leaving $ 3,231. 13. on Tools

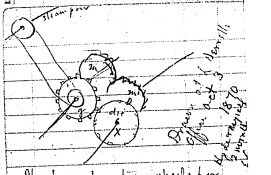
The union that Edwards
put on the first Model
of Pope & Edison



Drawn at Sewells office
Oct 3 1870
Continued 2 months before.

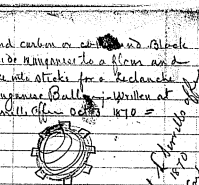


Machine for perforating paper for Telegraphic purposes. m is punch which is sharpened upon its end so that it will shear the paper like shears instead of pressing out X is paper drawing ~~apparatus which draws the slide up by the forward & backward motion of the upright~~ P. e is a knife edge fixed in such a manner that it will move down but not upward. K is a key provided with Cam teeth of any number or required shape when the key K is depressed it gives a number of teeth forward motion to the punch & paper drawing apparatus which produces a hole.



Plan for making type wheels for Printing Telegraph & other purposes.
g is the wheel driven and rotates at a great velocity by steam X is a hardened steel die. M M' & M are grooved wheels which mesh into each other and keep the speed of g & X equal now by pushing slowly the die wheel against the wheel g when in motion the die wheel contains sunk letters impressed or raised the letters upon the edge of the tooth in wheel g etc

Grind carbon or charcoal and Black Oxide of manganese to a flour and make into sticks for a Leclanche Manganese Battery written at F. Sewell. Office Oct 3 1870 =

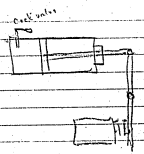


Rotating Battery to prevent polarization of the electrodes the two elements are fastened to a stop that approaches revolving in a trough containing the exciting fluid which can be made to be rotated by a power that the shaft can be of great length & contain any desired number of elements that be protected from approaching contact with outside

(19)

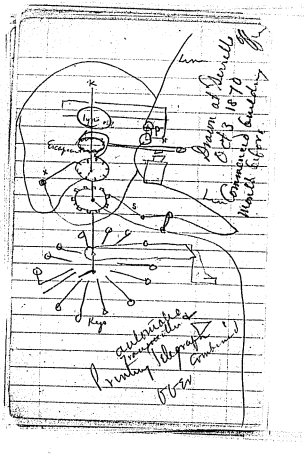
Made 1 March 1870

Sworn to 1 Sept 1870



To produce a adjustable slow motion by means of a guide working by a magnet or other power acting in a cylinder in an chamber and a cock valve the cock being regulated and the power applied to the piston it goes forward as fast as the air can pass through the cock which can be so regulated that an infinitesimal amount passes out or a large amount which takes have a gives a stroke motion to the guide

(20)



The shaft It has 9 which upon it the first is type wheel to record the escapement Wheel

the third a brass wheel with three insulated plates

on its periphery upon which the spring X finds

the wheel is so constructed with the insulating

input T that when the shaft has been allowed

to continue closure of the circuit the

spring X is upon one of the insulated segments

which allows the circuit to be broken

except it is struck but when the wheel is rotated

quite rapidly the spring X swing in contact

with the brass portion of the wheel for to

10 times as much as the insulated segments and this

circuit is of too short a duration to effect

the primary magnet The 4 wheel is

a break wheel having a spring Y rubbing

upon the teeth upon its periphery; this

wheel is opening is permitted definitely

with the law and by the nature of the

escapement it is made to make a break

in circuit of the magnet which gives it

motion consequently it motion already

indicated upon the same principle

as the powder Dial Telegraph of

Krummer illustrated & described by

Latimer Rubs upon the

end of the shaft is a detent wheel

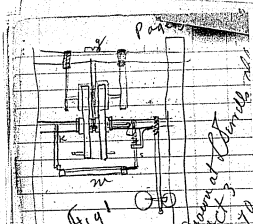
is rigid & revolves with the shaft around

the path of a number of pegs which when

depressed stop the shaft do not which

assume position etc

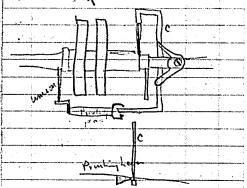
(21)



Arrangement for rotating two
type wheels upon one shaft by
one escapement & one lever
so that one type wheel can be rotated
while the other is locked & vice versa
This is done by a keyed movable
lock on the shaft of the type wheel

which is moved back by being
commed by the commed detent g and
commed forward by the upward movement
of the Pope heam m com. frock e
when the shaft is in a certain
position. One of the type wheels
will be always commed backward
except when the operator brings
the wheel into a given position
then by an upward movement
of the printing lever the type
wheel has been locked to
the shaft & commed onward
but will be commed back by
g unless he raises the
printing lever again. The
k is the unison spring
for bringing the shaft at any
revolution at a given point
indicating by the printing
lever the

Fig 19 Page 4



Same principle as in Fig 1 Page 3.

Double Polarized Relay

Drawing of Double Polarized Relay Fig 3

18 To Construct Page 3

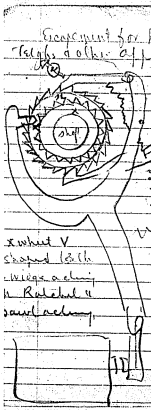
Polarized Magnet with two tongues but with but one pair of magnets these tongues are both pivoted in the back of the magnet and by giving them or pulling them close to one side of the other one tongue will work on a positive current to the other on the other hand current is interrupted by from that current is interrupted like a common Relay and vice versa

When a negative is sent in with the other tongue in then can be a current between the forks of the magnets that will make strong or when the current is strong but not when it is weak

Ames:

Die Sinker & Vise	33.00
4 Spool Drill Press	350.—
5 foot Eng L 13"	400.—
7 in swing Jo & Vise	300.—
	1610.00
	161.50
	~~1610.00~~
Michigan Tooling	
Sold	57,449.00

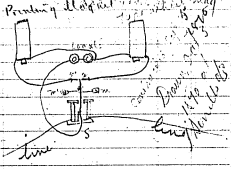
Equipment for Punching "Telegraph Poles" of Paper.



Patented 1st of November 1870

(24)

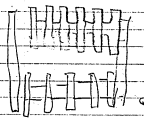
Pendulum Magnet



Means of working two magnets upon one wire

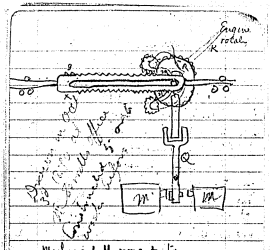
S is a polarized Magnet
a tongue is centered equidistant between the poles of both the same one wire. When say a polarization of negative Electricity is sent through the tongue of wire S is attracted to south pole & shoots, spins & then pulls back & swings over which wing S. line

Electro Magnet



Coils wound with wires in this form or bound out of solid stiff & placed in between tongue & the wire by means of these slots in the Cross cap & wound from

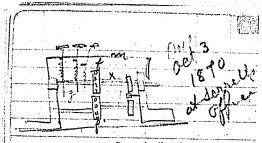
one end of the Electro Magnet to other by telling all a magnet one



Mechanical Movement To

To transmit a continuous rotary motion into a back and forward motion such long which shall stop itself at each of the point between which it plays. This is done by having teeth at g & none at x & teeth at h & none at

flange which has a milled groove by the side of these clicks go a cam which are rigid upon the shaft upon the ends of these arms are clicks moveable which run along the milled flanges now of the rack goes forward the click engages in the milled teeth and the gear wheel is locked to the shaft which is then rotated but the other wheel goes in opposite direction is not locked now when a back motion of the rack occurs the other wheel locks & carries shaft forward in same direction.



Gear Wheel Strap

Approaching for Punching out the Figures for the amount of a Check etc.
x is shaft with 1/2 to 3/4 diameter having 10 to 20 Ribs cut in it lengthwise
m is in the form of a Gear Wheel m is a gear plate These plates guide keys with Racks upon them the teeth of the Racks engaging in gearing in a book with the rules

on x = f & f' are two wheels containing letters on relief the other sunk in. They act like a punch. The papers pass between them & the punched shaft x has a sliding bearing.
Any number of keys can be used on the key after the rack is a cam to press the wheel down to contact of punch.

(27)

Shaper	550.00
Surface Grinding M & 3 wheels	129.00
20 Vises at 5.75	115.00
2 Screw Mac	808.50
7 in Lath	
13 in Lathe	
4 Drill Spindle Press	1449.00
Die Sinker	

305150

all new machines

I will hereafter keep refill wood

28